Goods Movement Action Plan Phase II - FACTSHEET

THE CURRENT SITUATION AND ISSUES – select quotes

- "California's own anticipated population increase, let alone its geographic position as a gateway to the Pacific Rim, are inevitable drivers of goods movement growth. The expansion of trade in California is not a matter of choice. Ignoring this reality is irresponsible." III-2
- "As the State develops its goods movement initiatives, the integrity of local and regional processes must be maintained while adding elements that benefit from a statewide approach." ii
- 2003, LA drivers burned an extra 407 million gallons of gas in 623 hours stuck in traffic for a cost of \$10.7 billion III-3
- Cost of congestion to the freight industry is estimated at 70\$B III-3 *Seaports* -
- "... one area that is underfunded is the protection of seaports." By feds III-21
- "Traditionally, those entities that own, operate, or control each of the corridor activities
 have made independent decisions regarding needed improvements or enhancements to
 their respective operation. While such a process has worked well in the past, the
 explosive growth of trade projected over the next two decades requires that decision
 makers consider project priorities and consequences relative to the entire goods
 movement system in California not just their segment." V-12
- "To our knowledge, the marine terminal industry and the nation's port authorities have not developed any kind of common metrics that provide a true assessment of current capacity. Without this measure, the government, and industry are in effect 'flying blind' in terms of knowing how much additional volume of imports and exports can be managed. . . "Waterfront Coalition whitepaper IV-15

Environmental -

- "Addressing the environmental and community impacts from truck drayage (short trip) operations at and near the ports is one of the most challenging issues involving the goods movement supply chain." V-15
- 1980s deregulation made trucking more competitive, but as a result it moved away from traditional company-owned vehicle with operator drivers business model to independent small owner-operator. V-15

Air Cargo -

• "As of yet, the Goods Movement Action Plan work has not addressed air freight." VIII-7 99% of airborne imports, and 93% of airborne exports rely on SF, and LA. 50% of cargo is shipped in commercial aircraft. "However, airlines and shippers are reluctant to make commitments to such sites until the population density is deemed sufficient to support the high cots of international flight operations." VIII-7 "Passenger and Air Cargo volumes expected to triple by 2025 – "The role of air cargo in California's export trade"

Inland Port -

• Inland Port "Typically, the break even point between rail and truck movement of goods is 750 miles." Therefore subsidies may be needed. UP and BNSF have been reluctant to look into this for fear it would take away from profitable long haul business! Successful Example is VIP: Virginia Inland Port – offers customs clearance, on-site warehousing,

- transloading, freight handling, flexible operating hours, and a chassis pool. It is located 220 miles from Seaport. VIII-10
- Without expanded facilities for loading and unloading, there is little incentive for rail lines to increase the mainline trunk routes to handle more capacity! V-17

Industrial Land Preservation -

• "As land-use planning is primarily a local function, it is crucial that local land-use policies be strengthened to ensure that incompatable uses (e.g. residential) do not encroach on goods movement facilities and corridors. Land-use decisions for goods movement corridors must be incorporated under these principles." VIII-12

STRATEGIES – *select quotes*:

- Community impact immediate term reroute trucks away from communities and promote buffer zones between residences and the port table I-1
- Reduce diesel PM 85% by 2020 III-4
- ARB inspecting 32 railyards in 2006 III-8
- Five solution sets identified based on criteria: V-14
 - 1. truck emissions reduction and congestion mitigation
 - 2. truck port access improvements
 - 3. rail mode increases
 - 4. freight community mitigation improvements
 - 5. system throughput/ velocity improvement
- We need to increase the daily number of trips while reducing wasted trips V-16
- "Increasing the fraction of container traffic that moves by rail is a critical strategy to reducing congestion and emissions caused by trucks." V-17
- "Increasing international air freight capability among a wider range of California airports would help relieve congestion in ground support and ground access while providing more convenient access to local users." VIII-7
- "... developing appropriate transportation options that recognize the unique needs of the agriculture industry must be a part of an effective goods movement strategy." VII-8 Value of AC Ag exports in 2004 was 8.2B\$ / 14% of total US Ag exports "aviation in California: benefits to our way of life" VII-8

Immediate Actions: Now

- Pierpass
- Expand port labor force
- Virtual container yard
- Shuttle train project
- Develop national chassis pool
- Port-wide terminal appointment system
- "Develop comprehensive goods movement data collection methodologies, modeling and data evaluation." I-6

Short Term Actions (0-3 yrs):

- SR-47 Ala Corridor expressway
- I-710 port terminus projects
- LB Gerald Desmond bridge
- BNSF/UP Colton Crossing rail grade separation
- OAK port outer harbor intermodal terminal
- UP rail Oak to Martinez capacity upgrade
- Altamont Pass rail corridor/ Central Valley shuttle (CIRIS)
- Otay Mesa port improvements (SR-905 and SR-11 to I-805)
- BNSF Tehachapi double track UP Central Corridor double track, some tunnels

Intermediate Actions: (4-10yrs)

- Alameda corridor East grade separations
- BNSF near-dock facility at LA
- UP near-dock facility at LA
- I-5 truck lanes (SR-14 to Calgrove blvd)
- I-80 Cordelia truck scales
- SR 4 extension to Stockton port
- I-580 truck climbing lanes (E & W)

FUNDING

Sources -

- Truck weight fees = \$1 billion generated per year VII-3
- "Passage by the voters of Bond 1B [TCIF] establishes for the first time in the State's history a dedicated source of State revenues to support goods movement projects of both regional and statewide significance." VII-6
- \$3.1 billion into TCIF account = \$2 billion for infrastructure projects, \$1 billion for emission reduction projects, \$100 million for security projects I-4
- "But even with full use of bond proceeds [TCIF] and aggressive pursuit of "fair share" federal participation, other revenues will be necessary to meet funding requirements expected to exceed \$20B over the next decade." II-8
- ". . . because California ports are a gateway to the US market, the federal government must help mitigate the disproportionate impacts in California communities that are conduits for movement of imported goods to other states." VII-14

 Strategies -
- "Those who pay (whether taxpayers, users, or investors) must have the confidence that their investments will be applied to the intended purpose, and that the planned outcomes will be achieved." II-9
- In addition decision makers are suggested to "... take prudent action even thought uncertainties remain." I-3
- Along with "... pursue excellence ... through workforce development" I-4
- A key element in funding TCIF projects is the use of Joint Exercise of Powers Authority (JEPA). An example is the Alameda Corridor, a project of national significance financed and delivered by one agency established under JEPA. "One of the key business principles required to attract private investment is "certainty and predictability." Establishment of a single purpose joint powers governing structure has a greater potential for generating a high level of trust or assurance concerning project financing and delivery." VII-7
- A demonstration that the JEPA has the power and legal authority to: VII-7
 - o Enter into design build agreements
 - o Enter into a franchise or public private partnership
 - o Issue bonds
 - o Negotiate the establishment of user fees

IMPROVEMENTS IN THE SITUATION:

- RFID (radio frequency identification) Allows institutional improvements: Table I-1
 - o VTC matches empties with trucks headed in that direction eliminating empty containers being hauled
 - o Shared Chassis pool can be used by different companies eliminating need for trucks to bring their own chassis
 - o Trucker appointment system schedule appointments so no waiting
- CTC also said that under Prop 1B, \$1 billion go for SR-99 in the Central Valley VII-9
- Southern California has developed its own specific goods movement plan to help guide strategy called the Southern California Strategy for Goods Movement: A plan for action ii
- In addition, the Bay area has also developed the Regional Goods Movement study for the SF Bay Area ii

AIR QUALITY EMISSIONS:

Cost strategies -

- "On the private sector side, owners and operators of sources of air pollution will be expected to shoulder the majority of necessary equipment upgrades and replacements to achieve the required level of pollution control." VII-1
- Diesel truck retrofit and fleet modernization program:
 - o \$20 million cost for FY 06
 - o \$35 million cost for FY 07
 - o \$45 million cost for FY 08 VII-3
- ARB emissions reduction plan = \$6-10 billion cost IV-16
- "In general, ARB staff presumes that traditional regulations (which place the costs of control on the owners and operators of polluting sources) will provide the vast majority of progress needed to protect public health and attain ambient air quality standards." VII-11
- "The federal government has yet to deal effectively with the more challenging emissions sources. It needs to take aggressive action to push together international emissions standards for ships; to set more stringent national emissions standards for locomotives or marine vessels . . . "VII-14

Innovative strategies -

- "The GREEN freight initiative: A new vision with new values and a new commitment." Emphasizes buffer zones between goods movement land uses and adjacent, non compatable land uses. Ex, rail or truck route would be bordered by open space and wetlands. The Green corridor buffer would only be crossed by Green bridges. VIII-14
- "The first consideration of energy efficiency involves the measurement of fuel/energy consumption per mode of transportation. For instance: the amount of energy/fuel need to move a ton of goods per mile by different modes of transportation. This evaluation is useful in determining whether to move a unit of freight by truck or rail across a given distance. For shippers and logistics planners this is part of a typical decision making process." VIII-16

INDUSTRY METRICS TO MEASURE GOODS MOVEMENT PRODUCTIVITY:

- "Projects that reduce congestion not only improve velocity, throughput, and reliability, they improve Californian's quality of life." IV-8
- "Throughput density is the annual throughput divided by the size of the terminal. Increasing throughput density can increase throughput without physically expanding the port itself." IV-7
- Throughput density has three measures:
 - 1. Static storage capacity: # of TEU containers
 - 2. Container dwell time: time container physically at port
 - 3. Net/gross area ratio: % of space port actually has available for storage
- "To the logistics industry, the consistency of transportation times is just as valuable as the dimensions of velocity and throughput. Reliability considers all modes of the goods movement industry. Unreliable infrastructure in one segment of the goods movement system causes bottlenecks and adversely affects other links in the chain." IV-8
- "The velocity increase offered by any single infrastructure project is subordinate to the velocity across the entire intermodal supply chain." IV-12

The shipping industry has developed several widely accepted metrics: IV-12

- Average transit dwell time
- Truck turn times inside terminals
- Average container dwell time
- Ratio of on dock rail vs truck loading
- TEU by time of day
- TEU per quay length
- TEUs per acre per year
- Total TEU capacity
- TEUs per year
- Number of trucks waiting for primary inspection

- Container movement per hour
- Terminal gate moves
- Average terminal dwell time
- Intermodal cars on line
- Average train speed
- Turns per shift on and off peak
- Street and highway capacity
- Average processing time for inspected containers
- Number of ships waiting for berth
- Return time of equipment such as containers and chassis

Reliability metrics: IV-13

- Variance in trip time
- Customs availability at sea ports: average length of time takes cargo to clear customs
- Equipment constraints: how often chasis is rejected by truckers
- Berth availability: % of ship arrivals were berth is available within 4 hrs
- Pilotage: % of ship movements where pilot is available within 1 hr
- Towage: % of ships were towing service is available within 1 hr of confirmed ship arrival/departure time
 Other ship waiting time: % of ships delayed by factors other than berth availability, pilotage, or towage

Metrics of public safety and security: IV-14

- Rate of commercial truck collisions/ mile
- Rate of injuries/ fatalities in commercial truck collisions
- Average property damage in commercial truck collisions
- Number of commercial truck breakdowns
- Train accidents / million train miles
- Average customs, safety inspection times
- % of point of origin cargo inspected
- existence of port recovery and continuity of operations permeability of landside and seaside domain

Key indicators among important corridors: V-12

- Value by customs district
- Maritime container volume
- Port of entry tonnage
- Logistics jobs
- DVHD
- AADT trucks
- Total emissions per day
- Population

Using these criteria for importance of corridors for all State goods movement:

- LA = 60%
- Bay Area = 19%
- Valley = 13%
- SD = 8%